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## **EFFECT OF GYM TRAINING PROGRAMME ON STRENGTH ENDURANCE OF S.R.T.M. UNIVERSITY CAMPUS STUDENTS**

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### **Introduction :**

The world of the Gym is ever expanding with increasing intensity of competition and enlarging scientific studies of human movements. Gym is dynamic in nature and progressive in outlook.

In this modern age, exercise has become a basic need for every individual because the sedentary life style of men has reduced the efficiency of humans. The less working capacity of humans has cost many problems like weakness, illness, chronic diseases etc. In past our ancestors were quite healthy & fit. The big reason was that, they had to perform a lot of hard physical activities like running, walking, jumping etc. The environment in past was less polluted. Moreover, they had less stresses in their life. Today it is all opposite, i.e, Physical activity is less, environment is polluted, unhygienic condition exist all around, life is full of stresses, unbalanced diet etc. All these factors have reduced the efficiencies of humans. Today, we desperately require physical fitness not only to improve our abilities but also to improve our health wellness. This will also help to develop healthy environment around us along with community health, thus nation will be benefited. By doing physical fitness programmes we can improves our fitness ,wellness & health.

The gym training is a process of athlete improvement, which is conducted on the basis of scientific principles through which systematic development of mental and physical efficiency capacity and motivation enables athletes to produce outstanding and record breaking athletic performance. Physical exercise is important for maintaining physical fitness and can contribute positively to maintaining a healthy weight, building and maintaining healthy bone density, muscle strength, and joint mobility, promoting physiological well-being, reducing surgical risks, and strengthening the immune system. Developing research has demonstrated that many of the benefits of exercise are mediated through the role of skeletal muscle as an endocrine organ. That is, contracting muscles release multiple substances known as myosin's which promote the growth of new tissue, tissue repair, and multiple anti-inflammatory functions, which in turn reduce the risk of developing various inflammatory diseases.

### **Significance of the study:**

- This study would be helpful to reduce the undue fatigue and injuries of players..
- This study would generate the interest in physical education teacher, gym trainer and coaches to improve the physical fitness level of boy students.
- The study would help the gym trainer to select suitable training program.

- The effect of gym training would bring forward the merits and demerits of each exercise.
- The findings would be helpful in introducing the new exercise in gym training program

**Objectives of the study:**

- To measure the strength endurance of the S.R.T.M campus students before and after training programme.
- To compare strength endurance of pre test & post test of the S.R.T.M campus students.

**Hypothesis:**

- There would be a significant difference between the strength endurance of the students before & after the strength endurance training programme

**Delimitations:**

- The subjects for the study were selected from the S.R.T.M.U Campus Nanded.
- The age group of the subjects was in between 19-23 years boys students only.
- The study was delimited also to the following selected physical fitness components such as Strength Endurance(Bend knee sit ups, Floor push ups, Chin ups, Squat)

**Experimental training was given in one month training programme**

Treadmill or Athletic training	Training load, frequency, intensity as per time-table scheduled.
Cycling	
Sit up	
Vertical leg raise	
Cable pulley (Front & Back)	
Chin up	
Squat with rod & plate	
Floor push up	
Bbl curl &dbl curl	
Cable push down	
Seated leg press	
Wrist curl	

**Methodology :**

This is an experimental research .The research work is been divided into three steps - PreTest - Training period - Post Test. Researcher Purposely selected 20 number of boys student from S.R.T.M.U. Nanded. According to the above mentioned division of training, researcher take the pre test of the subjects. After the completion of pre test, researcher started with the training programme of one month duration. And after providing training, the researcher lastly conduct post test of the students.

- **Data Analysis and Interpretation –**  
Data was Analysis by SPSS Software.



**TABLE - 1**

**Morphological Characteristics of Age, Height, Weight of Boys Among S.R.T.M.U. Campus Students**

Variables	No.of Students	Mean	SD
Age	20	21.35	1.620
Height	20	168.35	5.012
Weight	20	60.6	11.01

Table indicate the mean age of training group was 21.35 & SD was 1.620. The mean Height of training group was 168.35 & SD was 5.012. The mean Weight of training group was 60.6 & SD was 11.01.

**TABLE - 2**

**Mean Scores, Standard Deviation & T-Values of Boys Students Among S.R.T.M.U. Campus with Respect to Strength Endurance components.**

Variable	Test	No. of students	Mean	S.D	M.D	S.E	T-ratio
Chin up	Pre-test	20	9.9	2.256	2.95	0.709	4.13*
	Post-test	20	12.85	2.264			
Floor Push up	Pre-test	20	29.55	8.907	5.90	2.96	1.99*
	Post-test	20	35.45	9.851			
Bend Knee Sit ups	Pre-test	20	25.15	5.208	4.95	1.795	2.76*
	Post-test	20	30.1	6.114			
Squat	Pre-test	20	27.25	4.815	6.20	1.336	4.460*
	Post-test	20	33.45	3.542			

Table No 2 - indicates means scores, standard deviation & t-ratio of effect of gym training on strength endurance of SRTMU boys with regards to Chin ups of SRTMU boys, means values 9.9 & 12.85 respectively were observed (table 2), the obtained t-ratio 4.13 was significant 0.05 level indicate that there was significant effect of Chin up on SRTMU boys , thus the research hypothesis was accepted.

Table 2, indicates means scores, standard deviation & t-ratio of effect of gym training on strength endurance of SRTMU boys with regards to Floor Push up of SRTMU boys, means values 29.55 & 35.45 respectively were observed (table 2), the obtained t-ratio 1.99 was significant 0.05 level indicate that there was significant effect of Floor Push up on SRTMU boys , thus the research hypothesis was accepted.

Table 2, indicates means scores, standard deviation & t-ratio of effect of gym training on strength endurance of SRTMU boys with regards to Bend Knee Sit up of SRTMU boys , means values 25.15 & 30.1 respectively were observed (table 2), the obtained t-ratio 2.765 was significant 0.05 level indicate that there was significant effect of Bend Knee Sit up on SRTMU boys , thus the research hypothesis was accepted.

Table 2, indicates means scores, standard deviation & t-ratio of effect of gym training on strength endurance of SRTMU boys with regards to Squat of SRTMU boys, means values 27.25 & 33.45 respectively were observed (table 2), the obtained t-ratio 4.460 was significant 0.05 level indicate that there was significant effect of Squat on SRTMU boys, thus the research hypothesis was accepted.

### **Conclusion:**

- There was a significant difference of chin up of the individuals before & after the training Programme.
- There was a significant difference of floor push up of the individuals before & after the training Programme.
- There was a significant difference of bend knee sit up of the individuals before & after the training Programme.
- There was a significant difference of squat of the individuals before & after the training Programme.

The S.R.T.M.U campus students who were considered as the variables for the study, they undergo a regular training session daily basis for the whole year. Therefore there was much difference between their whole performance after the training. The duration of training was one month only.

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